

AMSC Accomplishments

Boston AMSC

Accomplishment: Active Threat in the Marine Environment working group.

Explanation: The working group developed and submitted for approval a Concept of Operations CONOPS for Active Threat in Marine Environment. After approval by the Captain of the Port (COTP), the CONOPS was exercised and updated based on lessons learned. The working group transitioned to a Permanent Advisory Group at the end of the year.

Accomplishment: Preventive Rad/Nuc Detection (PRND).

Explanation: The maritime PRND CONOPS/SOP was exercised w/state wide CONOPS in conjunction with the Sail Boston 2017 Sears Level 1 event.

Accomplishment: SAIL BOSTON 2017.

Explanation: The Sail Boston 2017 tall ships event took place June 17-22, 2017. Fifty-two tall ships from 13 countries participated in the Parade of Sail and event festivities, which drew an estimated one million plus visitors to the Boston area. Sail Boston was designated a DHS Special Event Assessment Rating (SEAR) Level I event and a Marine Event of National Significance. A flotilla of 44 CG, state, and local law enforcement vessels were strategically positioned along the 8 nautical miles of Parade of Sail route to enforce safety and security zones and protect the tall ships and the public.

Long Island Sound (LIS) AMSC

Accomplishment: AMSC Executive Steering Committee (ESC).

Explanation: Four meetings of overarching AMSC ESC representing the entire COTP zone. This included one virtual meeting to review the new draft Cyber NVIC for the public comment period. Also, AMSC hosted daylong maritime focused Cyber Security workshop. National and State speakers focused on increased awareness how cyber-attacks exploit vulnerabilities and impact systems, that Operational Technology, mobile devices, and IoT are vulnerable to attacks, basic steps to reduce risk, simple response/recovery plans can improve safety and save money, that attacks on cyber systems could support or magnify conventional attacks, and the importance of information sharing within industries and with appropriate agencies.

Accomplishment: New London Marine Group, CT Division of Emergency Management and Homeland Security (DEMHS) and AMSC Members Plan for Real World Events.

Explanation: Eight CT Region Four New London region "Marine Group" AMSC subcommittee meetings, along with one Search and Rescue (SAR) Maritime Security and Response Operations (MSRO) field drill. Also the annual Area Unified Command operations surrounding the large scale Marine Event "SAILFEST", and the joint Naval

Protection Zone enforcement operations due visit of naval HVU during the CT Maritime Heritage Festival. Tested elements of the Area Maritime Security Plan (AMSP).

Accomplishment: New Haven Marine Group, CT DEMHS, and AMSC Committee Members Plan and Execute Interagency Security Exercise.

Explanation: Six CT Region Two New Haven region “Marine Group” AMSC subcommittee meetings; along with one Transportation Security Advisor (TSA) Intermodal Security Training and Exercise Program (ISTEP) field exercise focused on a maritime active shooter/criminal mass casualty incident involving a large passenger vessel operation on the CT River. Also one New Haven COOP security tabletop exercise that included a cyber aspect. Test elements of the AMSP.

Accomplishment: Port Security Grant Review/ Evaluation.

Explanation: The COTP/Federal Maritime Security Coordinator (FMSC) provided an updated Port Security Grant strategy and guiding principles for the LIS COTP zone. This stimulated effectiveness in review/scoring of PSG applications to support the best risk reduction investment impact, balanced by region. It also helped facilitate aggregate risk reduction strategies by region, and further sustainment of our most critical port security capabilities from the grassroots level up.

Accomplishment: Port Security Grant Outreach.

Explanation: The LIS COTP zone realized a total of \$2,049,238 in 2017 Port Security Grant funds. 18 of 49 Investment Justifications (IJs) received funding. 16 IJs were funded with the state of CT and two in Long Island.

Accomplishment: CT Cyber Security Subcommittee Meetings.

Explanation: Monthly Cyber Security Committee. The State of Connecticut leads this CS committee and it has a select role as one of five states in the National Governors Association (NGA)’s “Cyber Security Policy Academy”. Participation provides training and outreach to AMSC members.

Accomplishment: LIS AMSC Members at large.

Explanation: Participated with the State in the national CYBERGUARD PRELUDE 2017 exercise. As a result of our AMSC input, some of the national exercise play was able to focus on unique issues related to the maritime domain, such as Cyber interference or spoofing of ship systems such as Global Positioning System (GPS), Automated Identification System (AIS), International Maritime Satellite (INMARSAT) or other ships’ long range comms systems, spear phishing at Maritime Transportation Security Act (MTSA) facilities, suspected intrusion into camera/monitoring systems, spoofing of CG and other Government Agencies.

Accomplishment: Radiological Response Rep Exercise. Quarterly Millstone Point (coastal) Nuclear Power Station Emergency Planning Zone (EPZ) and Security meetings.

Explanation: Select elements of the AMSC reps participated in “off-year” plume release exercise, providing support to State EOC and local Waterford EOC (this relates to one of our discretionary Transportation Security Incident (TSIs) in our AMSP). Continued workgroup meetings to finalize new Nuclear Regulatory Commission (NRC) required “overwater protective action recommendation areas” for the 10-mile EPZ waterway areas. Participated in advance planning for March 2018 Federal Emergency Management Agency (FEMA) evaluated plume release exercise. Results of exercise used to finalize new NRC required “overwater protective action recommendation areas” for the 10-mile Economic Protection Zone (EPZ) waterway areas surrounding the Coastal Nuclear Power Plant in support of the Radiological Emergency Plan. This pertains to one of the TSI in the LIS AMSP.

Accomplishment: State of CT Dept. of Emergency Management and Homeland Security Advisory Council and the State of NY Division of Homeland Security and Emergency Services Advisory Committee.

Explanation: Quarterly meetings with the State of CT Dept. of Emergency Management and Homeland Security Advisory Council and the State of NY Division of Homeland Security and Emergency Services Advisory Committee allows the AMSC to develop a working relationship, information share, develop Memorandum of Understanding (MOUs)/Memorandum of Agreements (MOAs) to assist in prevention, response, and recovery from potential Marine Transportation System (MTS) disruptions.

Accomplishment: LIS AMSTEP.

Explanation: One AMSTEP exercise focused on an incident surrounding large oil transfer facility (MTSA site; Maritime Security Risk Analysis Model (MSRAM) target) in Port of New London including a pre-incident threat-based Cyber Security element. Incorporating the emerging threat into the scenario highlighted potential gaps in the assessment and the AMSP.

Accomplishment: MTSA Security Tabletop (TTX).

Explanation: New Haven AMSC subcommittee conducted Facility (Co-op) focused Security TTX with a cybersecurity element to it to address issues related to implementing a new policy on cyber related breaches of security or suspicious activity into the AMSP.

Accomplishment: Maritime Focused Cyber Workshop.

Explanation: AMSC hosted daylong maritime focused Cyber Security workshop. National and State speakers focused on increased awareness how cyber -attacks exploit vulnerabilities and impact systems, that Operational Technology, mobile devices, and IoT are vulnerable to attacks, basic steps to reduce risk, simple response/recovery plans can improve safety and save money, that attacks on cyber systems could support or magnify conventional attacks, and the importance of information sharing within industries and with appropriate agencies.

Accomplishment: PSRA 2017.

Explanation: Completed Port Security and Resilience Assessment (PSRA). Highly successful PSRA process targeted both large Passenger/Vehicle Ferry operations (Cross Sound and Bridgeport-Port Jefferson). Included both terminals for each on Long Island and Connecticut. Also one large marine oil transfer facility (Shell New Haven) and one waterway (lower Thames River and approaches). The results were used to update the port wide assessment.

Accomplishment: Use of AWS-PP.

Explanation: Continued effective use of the Alert Warning System for Port Partners (AWS-PP). Held five AWS-PP drills. Also used AWS to distribute Threat Awareness Warning after a serious national Cyber Threat. Focused use of AWS-PP on different segments of the AMSC structure (ESC and subcommittees) in separate targeted drills and during a large-scale high-risk marine event. Achieved expeditious notification and response from all essential AMSC ESC and subcommittee membership elements with accurate tracking of receipt and acknowledgment.

Accomplishment: MPSA awarded to AMSC Vice chair.

Explanation: Successfully nominated and awarded the USCG Meritorious Public Service Award (MPSA) to out-going Co-AMSC Vice-Chair, William Shea, Deputy-Commissioner State of CT DESPP/DEMHS, upon his retirement.

Accomplishment: Operation Blue Trident.

Explanation: AMSC partners partnered with the USCG and the New York DEC to conduct Operation BLUE TRIDENT in the Long Island East End maritime domain. This included the Long Island East End Maritime Law Enforcement Task Force in a multi-faceted training and surge operation focused on small vessel security, preventive RAD/NUC detection operations, boating safety and maritime environmental compliance. It exercised the techniques of preventing and interdicting potential maritime terrorist-related activity by deploying radiological detection equipment on multiple platforms, conducting both wide-area and localized screening while projecting a maritime-based law enforcement presence, enhancing navigational safety, and protecting critical infrastructure and key resources on Long Island waters.

Accomplishment: OP SHIELD - selected by 2018 Natl HLS Conference as a topic to share.

Explanation: Participation in annual Long Island East End Maritime Task Force surge operation OP SHIELD, a joint CG and LE operation focusing on boarding foreign-flagged vessels and HLS issues. For 2017 this was sync up with NY Department of Environmental Conservation (DEC) Operation Blue Trident. As a result, OP SHIELD has been selected as one of the presentations in the Critical Infrastructure track during the upcoming 2018 National Homeland Security Conference in New York.

New York and New Jersey AMSC

Accomplishment: Fire Department New York (FDNY) Shipboard Firefighting Simulator and Training.

Explanation: In 2017 the FDNY Shipboard Firefighting Simulator was used to train 3,312 New York City Fire Department members. Additionally, 950 members from regional firehouses were trained on the Simulator, for a grand total of 4,262 local and regional personnel trained on the equipment in 2017. This brings the total of personnel trained using the Simulator to 12,980 since its inception (9,577 FDNY members and 3,403 being from OGAs). Plans are being developed to train Staten Island Ferry Personnel, Merchant Marine Academy Cadets, the newly formed NJ Regional Task Force members, Learn America personnel, FDNY Marine Operations, FDNY Emergency Services (EMS) & NY Police Department (PD) Harbor Units. The 2017 trainings using the Simulator are as follows:

FDNY Marine Seasonal Boat Two-Week Training Course (80 hrs.) 4/17/17 - 4/28/17 (39) members from AMSC participating agencies were trained. Topics covered: boat handling, water rescue exercises, cold water survival, night operations, marine electronics, emergency towing, S.A.R, NAV rules, Hazmat review, terrorism awareness, medical responses, patient transfer off ships, fire pump operations, relaying water, anchoring drills, marine knots, maritime scene safety, communications, area of response familiarization, and target hazards. All topics covered were a combination of classroom-lecture and hands-on practical.

- FDNY Rescue Medic Marine Familiarization Course (24 Hrs.) three sessions: May 17th- May 19th, May 24th- May 26th, May 31st- June 2nd (32) members trained. Topics covered: marine environment, terminologies, communications, patient transfer off ships, Jacobs Ladder drill, cold-water survival, terrorism awareness, M.O.B, maritime scene safety, retrieving a patient from water, EMS drop-off locations, & the FDNY Marine Operations Tiered Response Plan.
- FDNY Marine Seasonal Boat Program (Marine Co.'s 3, 4, & 8) a total of (39) members, participated in (20) various surf rescue drills, cold-water rescue drills, & multi-unit drills throughout NYC waterways.
- FDNY Marine Seasonal Boat Program also participated in various inter-agency drills with the USCG, NYPD, New Rochelle PD, Nassau County PD, PAPD, Monmouth County Sheriff's Dept., Army Corp of Engineers, & NYC Lifeguards that include the SOP's pertaining to: coming alongside a moving vessel, SAR, radiation choke point exercises, Man Overboard (MOB), & emergency towing.

Accomplishment: Regional Fireboat Task Force.

Explanation: The New Jersey Regional Fireboat Task Force (NJRFTF) grew from a concept to operational force multiplier for SECNY during CY2017. The Task Force consists of twelve fire departments that cover over 50 miles of coastline within the

SECNY AOR. The member fire departments, which are listed below, are located in six counties of NJ's 21 counties.

NJRFTF Members:

- Edgewater Fire Department
- North Hudson Regional Fire Rescue
- Hoboken Fire Department
- Jersey City Fire Department
- Bayonne Fire Department
- Newark Fire Department
- Kearny Fire Department
- Secaucus Fire Department
- Elizabeth Fire Department
- Linden Fire Department
- Carteret Fire Department
- Perth Amboy Fire Department

During the winter months, efforts concentrated on developing and approving a uniform communications Standard Operating Procedure to be used by member departments to communicate with the Coast Guard and with North Hudson Regional Fire Rescue (NHRFR) Communications, which is the dispatch center for the Task Force. NHRFR received PSGP funds to augment staff, purchase equipment, and provide training to support this undertaking.

Spring and summer months saw classroom and underway training for 12 dispatchers and 25 firefighting officers in preparation for a Task Force service commencement date of September 18. Classroom training was conducted at Sector NY, the North Hudson Dispatch facility, and at the NYPD Counter-Terrorism facility. It involved both classroom and vessel simulator training. Additionally numerous firefighters received training at the FDNY shipboard firefighting simulator.

NJRFTF operations commenced with a "soft start" on September 6, followed by a successful "hard start" on September 18 as scheduled. Between September 18 and December 31, the Task Force responded to 24 maritime emergency calls (an average of eight per month) and conducted 42 Maritime Domain Awareness patrols.

Accomplishment: Homeland Underwater Port Assessment Plan.

Explanation: NORTHCOM / DOD Initiative PESEIDON and HUPAP (Homeland Underwater Port Assessment Plan): In 2015, USNORTHCOM developed a USCG MOA in final coordination. MOA institutes a periodic, low-cost assessment procedure to develop appropriate preparedness measures and response plans in select ports. The Port of NY/NJ/Albany established the lead in this effort with NORTHCOM team members. The IUPA was completed in 2016 and subsequently incorporated in 2017 into AMSP annex #10301.

Accomplishment: CGSECNY Operation Offshore Anchorage Overflight Agency: Nassau County (NC) Police Department- AVIATION.

Explanation: Nassau County Police Department (NCPD): High resolution Closed Circuit Television (CCTV) with infrared imagery was installed onboard NCPD aviation resources using Port Security Grant funds. With this capability, Sector New York can access live streams and still photographs of vessels entering or departing the port, which greatly enhances our situational awareness and ability to assess risks. NCPD helicopters conduct overflights of Graves End Bay Anchorage every week, including overflights of high interest vessels/vessels of interest when requested. In CY 2017, NCPD conducted 58 overflights of vessels and provided real time imagery to our boarding teams, marine inspectors, and intelligence staff.

Accomplishment: NYPD Aviation and Video Feeds.

Explanation: Through the Lower Manhattan Security Initiative (LMSI) and Midtown Manhattan Security Initiative (MMSI), the NYPD monitors video feeds from approximately 19,000 cameras mounted throughout New York City. This includes waterfront facilities and other port infrastructure. Additionally, NYPD aviation assets transmit live-video feeds back to the NYPD command center. On 18 December 2017, The NYPD Commissioner and COTP signed a Memorandum of Understanding (MOU) in which the NYPD agreed to install a secure connection to the Sector Command Center, providing the Coast Guard with access to its camera feeds throughout the city, including its aviation assets at no cost to the Coast Guard. This project will allow Sector New York in effectively monitoring hundreds of miles of waterways, facilities and vessels offshore by simply logging into the camera system. The installation is anticipated to be complete in the spring of 2018.

Accomplishment: Cyber Security

Explanation:

1. Port of New York and New Jersey and Port of Albany AMSC Cyber Security Subcommittee
2. Participating Organizations
 - a. Federal – USCG Sector New York, USCG District 1 Boston, U.S. Customs Boarder Protection, Federal Bureau of Investigations (FBI)
 - b. State – New Jersey Office of Homeland Security and Preparedness (NJOHSP), Port Authority of New York/New Jersey (PANYNJ), Army National Guard, New York, Department of Information Technology for New York (DIT NY), New York State Department of Homeland Security (NYDHS), New Jersey Cybersecurity & Communications Integration Cell (NJCCIC), New York State Governor's Office, and New York Office of Homeland Security (NYOHS)

- c. Local - Nassau County Police Department (NCPD), New York City Office of Emergency Management (NYC OEM), New York Waterways, New York Police Department (NYPD), Fire Department of New York (FDNY), and New York Chamber of Shipping
 - d. Industry – Goldman Sachs, Phillips 66, International-Matex Tank Terminals (IMTT), Maher Terminals, Global Container Terminals, ConEdison, Marathon Petro Company, APM Terminals, PNC Terminals, Moran Shipping, Kinder Morgan, Motiva, Red Hook Terminals, New York City Ferry, New York City Water Taxi, McAllister Tug, Kirby Tug, Cape Liberty Cruise Terminal, Citywide Ferry, American Bureau of Shipping (ABS), Vitol, Maritime Security Center/Stevens Institute of Technology, Rutgers University, Seaman’s Church, Bayway, Ports of America, Blank Rome LLP, WAPAC Labs, Stephenson Disaster Management Institute/Louisiana State University, and Lunarline, Inc.
3. Meetings
- a. Preparation for Cyber Game & Workshop – Concept and Objectives Meeting, Initial Planning Meeting, Mid-Period Planning Meeting, Final Planning Meeting, Evaluators Meeting. Also, numerous phone conferences and email correspondence in preparation for event.
 - b. Presentation for Members at Large (MAL)
 - c. Presentation for AMSC Executive Steering Committee
4. AMS Plan Status
- a. Development of AMSP Cyber Annex has begun and expected completion date of 15 FEB 2018.
5. Port Security Countermeasures
- a. Development of awareness and training for port partners in the realm of cyber security.
 - b. Development and implementation of cyber game and workshop shed light on identified weaknesses within the port, viable threat actors willing to attack identified weaknesses, and identified measures/countermeasures for cyber-attack.

Accomplishment: Active Shooter.

Explanation: AMSC Response and Recovery Sub Committee, supported by the Small Passenger Vessel Sub Committee of the Harbor Operations Committee completed the revisions from the approved NYC Maritime Emergency Transportation Plan. Federal Air Marshal, New Jersey State Police (NJSP) Canine Unit and NYPD Counterterrorism continue to deploy aboard N.Y. Waterways private ferry vessels. NYPD Counterterrorism continue to deploy aboard NYC-DOT Staten Island Ferry public ferry vessels.

- 4-12-17 Ferry Incident Response Table Top Exercise – Monmouth County Response to Active Shooter.
- 4-5-17 Staten Island Ferry Field Unit training for Active Shooter.
- 5-1-17 – 8-31-17 Weekly NJ State Police High Speed Ferry Boarding for Active Shooter Incident Training – NY waterway.
- 3-29-17 Sector New York Active Shooter Threat Table Top Exercise.
- 4-5-17 Sector New York Active Shooter Walkthrough.
- 1-10-17 Recap meeting of Active Shooter Table Top Exercise.
- Data collected to compile Passenger Ferry Active Threat Plan draft.

Accomplishment: Mass Evacuation Planning.

Explanation: Developed a Port of NY/NJ Recovery Unit made up of key Port Stakeholders to serve as an advisory group to COTP/FMSC on port closure/openings following a TSI/National Disaster. Marine Transportation System Recovery Unit (MTS-RU) was employed during major natural weather related incidents, which impacted the port.

- 13-Feb-17 NYC Emergency Management discussed mass evacuation plans.
- 16-Feb-17 Teleconference w/New Jersey Office of Homeland Security and Preparedness (NJOHSP) to discuss Maritime Evac.
- 15-Mar-17 Initial Planning Meeting - Manhattan Evac Plan Operation New York City Office of Emergency Management (NYCEM).
- 29-Mar-17 Initial Planning Meeting Mass Evac TTX NYCEM.
- 17-May-17 Midpoint Planning Meeting Manhattan Mass Evac Exercise.
- 30-Aug-17 Manhattan Mass Evac Drill Final Planning Meeting SI Ferry.
- 15-Nov-17 Manhattan mass Evac TTX NYPD/ NYCEM.

Northern New England AMSC**Accomplishment:** Cyber Security Summit.

Explanation: In partnership with Senator Collins and King's Offices, University of Southern Maine, Maine Emergency Management Agency, and the Maine Cyber Security Cluster, SNNE's AMS Cyber Security Working Group coordinated and held the Partnership in Cyber Security Summit for cyber security month. The Summit was well received with 160 people attending from various organizations and allowed sponsoring agencies to satisfy a number of their cyber security strategy objectives.

Accomplishment: Pre and Post Season Cruise Ship Discussions.

Explanation: SNNE's AMSC established an annual pre-season cruise ship seminar included local responders, the cruise ship industry, local hospitals, and port management. For 2017, a Pre and Post-season discussions were held.

Accomplishment: AMSP TSI Exercise.

Explanation: A TTX was held to test elements of the AMSP. This ensured the selected AMSP TSI scenarios for AMS Region 3 was ensuring the selected still met the criteria for one of their top TSIs.

Accomplishment: Ferry Boarding Exercise.

Explanation: AMS Region 4 along with Lake Champlain Transportation (LCT) and Clinton County Sheriff Department completed an exercise to develop and practice boarding techniques on local ferries.

Accomplishment: Cyber Security Training.

Explanation: In partnership with Knox County Emergency Management Agency (EMA), SNNE Area Maritime Security Executive Steering Committee (AMS-ESC) sponsored the two-day cyber security course, Community Preparedness for Cyber Security Incident.

Accomplishment: Cyber Security Training.

Explanation: SNNE AMS-ESC sponsored two Also Known As (AKA) Evil at the Coffee Shop training session at the Maine Cyber Security Cluster.

Accomplishment: Marine Firefighting.

Explanation: SNNE Prevention Department sponsored two training sessions of Marine Firefighting for Land Base Firefighters and Command Strategies and Tactics for Marine Emergencies on vessels.

Southeastern New England AMSC

Accomplishment: Development of the Active Threat Response Subcommittee.

Explanation: During the September 2017 AMSC meeting, it was agreed upon to organize and convene an Active Threat Response Sub-committee in order to refine the recently drafted Active Threat Concept of Operations (CONOPS), which will become an annex of the SENE AMSP.

Accomplishment: Development of the Cyber in the MTS Subcommittee.

Explanation: During the September 2017 AMSC meeting, it was agreed upon to organize and convene a Cyber in the MTS Sub-committee to address the growing concern of cyber in the MTS with other Federal, State and local stakeholders.

Accomplishment: Ferry Boat Security Training Course Development.

Explanation: The Sector SENE staff and AMSC was approached by the CG Research and Development Center (RDC) to aid in the development of a project with the DHS Science and Technology Division to provide input for a Proof of Concept for a Ferry Boat Security Training course. The course is being developed as a discussion-based course designed to enhance ferry operator's abilities in quickly and effectively evaluating

suspicious and dangerous behaviors, and to take actions to protect themselves and their passengers is continuing. This course will be an adaptation of an existing Bus Operator Terrorist Awareness Training course. After an initial meeting on Oct. 19, 2017 with local ferry Company Security Officers (CSO) to determine the feasibility and need for this proposed course, the team from START (National Consortium for the Study Of Terrorism And Responses To Terrorism), conducted a needs assessment and is developing a facilitator guide that designated personnel can use to deliver brief training modules (30 minutes or less) at times that are convenient to the crew. They will provide a PowerPoint deck as an option but they are also designing the material so that delivery is not dependent on technology. In addition, they plan to pull, update, and supplement key content found across all of the existing trainings. The content of the proposed training will be provided to the Sector SENE staff (Prevention, Response, CPFR) in the second quarter of fiscal year 2018 for an initial review, and then on to CGD1, as well as Areas and CGHQ for review prior to being made available for ferry operators.

Accomplishment: AMSTEP Workshop VIBRANT HOPE 2017.

Explanation: An AMSTEP workshop was conducted on January 25, 2017 to present the contents of the recently developed Maritime Preventive Radiological and Nuclear Detection (PRND) Concept of Operations. This workshop emphasized the decision-making processes, communication and coordination of information, and deployment of resources involved in a maritime PRND event.

Delaware Bay AMSC**Accomplishment:** Port Security Grants.

Explanation: The AMSC Port Security Grants Working Group reviewed 25 applicants with 44 Investment Justifications (IJs) for port security related projects in the COTP Delaware Bay zone. \$13.3 million dollars of funding was recommend to FEMA. On September 1, 2017, FEMA announced the 2017 Port Security Grant Allocation. Twelve of Delaware Bay's AMSC grant applicants were awarded funds for a total of \$4,175,785.

Accomplishment: AMSTEP Exercise.

Explanation: Key members of Delaware Bay's AMSC participated in Delaware Bay's 2017 Area Maritime Security Training and Exercise Program (AMSTEP) 8-hour, discussion-based Tabletop Exercise (TTX). The purpose of the TTX was to test the Delaware Bay AMSP with main emphasis in the following Delaware Bay AMSP Sections: Awareness (Notifications and Communications); Prevention; and Security Response and Incident Management. The draft sections to incorporate cyber as a factor in one of the three TSI scenarios will be updated as a result of the exercise.

Accomplishment: Maritime Tactical Operations Working Group.

Explanation: Delaware Bay's AMSC Managing Board stood up Delaware Bay AMSC's Maritime Tactical Operations Working Group (MTOG). The MTOG focuses on maritime tactical operations and the coordination of law enforcement and special operations when responding to events that occur in the maritime environment. The MTOG is co-chaired by the USCG and the FBI. The MTOG consists of core members who are representatives from professional firefighting and law enforcement communities. The co-chairs in consultation with the FMSC may, as deemed necessary, invite additional participation from other communities.

Accomplishment: Charter Update.

Explanation: Delaware Bay's AMSC Managing Board led a multi-month effort to review, update and approve the AMSC Charter. During the course of this update, the AMSC Managing Board exhaustively and meticulously reviewed the charter, as well as Federal and Coast Guard regulations, and Coast Guard NVIC guidance to propose numerous recommended changes and improvements. Their actions ensured the AMSC Charter complied with all requirements and accurately reflected the structure and processes of the Delaware Bay AMSC.

Accomplishment: UAS.

Explanation: To ensure Delaware Bay AMSC's leadership is keeping abreast of emerging technologies, several different avenues regarding Unmanned Aerial Systems (UAS) were explored and new partnerships were formed (e.g., Federal Aviation Administration [FAA]).

Accomplishment: Cyber.

Explanation: Obtaining an analyst from New Jersey's Cybersecurity & Communications Integration Cell (NJCCIC) to Chair of the AMSC's Cyber Sub-committee has improved communications with AMSC members regarding cyber security threats, incidents, remedies for improvements, and countermeasure solutions. It provides a technical expert on the Managing Board who can accurately explain cyber information in non-technical language.

Accomplishment: Joint Area Committee and Area Maritime Security Committee Meeting.

Explanation: Annually each February Sector Delaware Bay facilitates a Joint Meeting of the Delaware Bay Area Committee and AMSC. The joint meeting agenda contains topics of interest to both communities. This meeting promotes partnerships and information sharing of policy, best practices, and lessons learned. The 2017 Joint Meeting included presentations on TWIC, Petroleum Logistics and Short Term Outlook, Pipeline Safety and Security, and Port Security Grant Process Review.

Accomplishment: Drug interdiction.

Explanation: Delaware State Police Maritime worked with Homeland Security Investigations Philadelphia (HSI), United States Coast Guard, Pennsylvania State Police, DEA and US Customs to form the Border Enforcement Security Task Force (B.E.S.T). As members of the B.E.S.T Delaware State Police maritime unit members have been part of several narcotics investigations in 2017 within the maritime domain, which have resulted in multiple narcotics seizure and arrests.

Accomplishment: Human Trafficking.

Explanation: Delaware State Police Maritime initiated a case with U.S. Customs involving human smuggling from foreign commercial vessels entering the United State. One case resulted in the arrest and prosecution of the lead smuggler and several other defendants who had been smuggling subjects into the United States for approximately 7 years.

Accomplishment: Intelligence gathering.

Explanation: Delaware State Police Maritime coordinated with United States Coast Guard on operations when Delaware State Police Aviation needed intelligence gathering off the Delaware shoreline.

Accomplishment: Military Ordnance.

Explanation: Delaware State Police Maritime worked with University of Delaware during the operational phase for deployment and recovery of inert military ordinance previously placed along the Delaware River shore. This project is an ongoing Department of Defense sponsored grant, which studies the movement of old military ordinance that was disposed of off the Delaware shore post World War II.

Accomplishment: Response techniques.

Explanation: Delaware State Police Maritime participated in the successful completion of High Water Rescue Training in Sector Delaware Bay which utilizes aviation rescuers deployed from helicopters for roof top rescues in the event of large scale flooding along the Delaware River and its tributaries.

Accomplishment: Rail security.

Explanation: Delaware State Police Maritime worked with AMTRAK Police Department on multiple Operation Rail safe initiatives to which members work as a force multiplier paying particular attention to bridges, overpasses, underpasses, train stations, and central instrument huts (CIH) along the railroad routes throughout Delaware.

Accomplishment: Critical Infrastructure (CI) Key Resources (KR).

Explanation: Maryland's Natural Resources Police (NRP) has aligned its patrol tactics, routinely conducting maritime-based checks of critical infrastructures located on Delaware waterways, and in-addition became capable of documenting its efforts.

Accomplishment: Port Security.

Explanation: NRP participated in "Operation Sea Hag" which was a joint response exercise with the Delaware State Police Maritime Unit and Delaware Information and Analysis Center (DIAC). This exercise provided a coordinated response of law enforcement vessels to locate and intercept suspicious vessels in the Delaware Bay by using the Suretrak system at DIAC.

Accomplishment: TWIC.

Explanation: TSA Inspectors from the Philadelphia field office conducted 34 TWIC verification activities in coordination with USCG Sector Delaware Bay Facilities Inspections. Results included: 1,037 TWICs checked utilizing electronic card readers or visual techniques, 9 investigations, 3 civil penalties recommended against individuals, and 6 warning notices issued.

Accomplishment: Threat Assessment.

Explanation: On January 17, 2017, the New Jersey Office of Homeland Security and Preparedness (NJOHSP) released the State's 2017 Terrorism Threat Assessment. This Terrorism Threat Assessment provides partners with an understanding of New Jersey's current threat environment and recent trends in tactics used by terrorists. The data will be used to assist the AMSC in conducting their annual Area Maritime Security Assessment (AMSA) Review.

Accomplishment: Cyber.

Explanation: The AMSC Cyber Subcommittee has been meeting quarterly to discuss cybersecurity issues that affect the Maritime sector. The Subcommittee is comprised of

representatives from both public and private sector, which provides a more holistic view of the current cyber threat environment. In each meeting, the Chair also conducts a briefing to the attendees on various advanced persistent threat (APT) groups - who typically are a part of or act on behalf of a Nation State – and any recent targeting of maritime sector entities, or any ongoing issues in cyber facing the maritime sector.

Accomplishment: CIKR.

Explanation: In February 2017, NJOHSP released the first annual Critical Infrastructure Resource Guide (CIRG) for critical infrastructure owners and operators in New Jersey. The CIRG profiles critical infrastructure in the state, offers a snapshot of threats to infrastructure assets, and provides resources for owners and operators of critical infrastructure to enhance preparedness. Provided information to the AMSC members to refine individual plans and the AMSP.

Accomplishment: Risk Management.

Explanation: In September 2017, NJOHSP partnered with the Federal Emergency Management Agency on a new program to build supply chain resilience in the grocery industry. This program is designed to foster awareness of the grocery supply chain, identify interdependencies and potential vulnerabilities, inform catastrophic planning, and be a pathway to work with private industry to mitigate risk. Information has been shared with the Sector Delaware Bay AMSC members interested in participating.

Accomplishment: Risk Management.

Explanation: In 2017, NJOHSP completed two Rapid Survey Tool assessments at maritime facilities in Sector Delaware Bay. The Rapid Survey Tool assessment captures a facility's physical and operational security, and resilience data. The resulting analysis allows owners and operators to understand their gaps and offers strategies to prevent, protect against, mitigate, respond to, and recover from any physical and cyber risks. Incorporation in their plans as needed and reviewed by the AMSC Executive Steering Committee as part of the annual AMSA.

Accomplishment: Cyber Security Exercise.

Explanation: Philadelphia Energy Solutions (PES) conducted a Cyber Security exercise, which involved ransomware and a completed takeover of the operational controls of the refinery. An Emergency Operations Center was established and senior leadership, along with subject matter experts, participated in the exercise. A full debrief was conducted and action items were identified. Those items will be tracked to completion.

Accomplishment: Firefighting.

Explanation: Philadelphia Energy Solutions (PES) participated in a live exercise with the regional Industrial Firefighting Group. This group is comprised of four refining/storage facilities in the USCG Sector Delaware Bay Area of Responsibility. Those organizations are Energy Transfers, Delaware City, Monroe Energy and PES. The

group consisted of 150+ members of the emergency response community and included the Marine Units from Wilmington and Philadelphia. The focus of the exercise was the mitigation of a shipboard fire and spill to the river. Large water and foam capabilities (15,000 GPM) were demonstrated and the involved ship was surrounded with boom to protect the environment. A full critique was conducted to capture potential improvements.

Maryland-NCR AMSC

Accomplishment: Maritime Tactical Operations Group (MTOG).

Explanation: Developed a high performing functional subcommittee, the Maritime Tactical Operations Group (MTOG). The MTOG on an average, conducts joint boardings monthly (recreational and commercial), organizes joint training such as Basic Maritime Operators Course (BMOC), Tactical Boating Operators Course (TBOC), Use of Force Training, and Tactical Walk-Through (Cruise Liners, Deep Drafts, etc.). Additionally, partially due to the relationships developed with MTOG partners, Sector Maryland-NCR now has two full time U.S. Customs and Border Protection (CBP) agents assigned and working physically at the Coast Guard unit. This close partnership will significantly improve coordination in the port and throughout the entire area of responsibility.

Accomplishment: AWS-Port Partners (PP).

Explanation: Revamped Alert Warning System (AWS) capability and processes. Updated port partner lists to ensure accurate notification process. Conducted routine AWS drills to maintain port partner emergency communications. Feedback from the membership this year was extremely positive. One example of a timely and informative information push was during the maritime industry cyber incident in June of 2017.

Accomplishment: Cyber & Intel Subcommittees.

Explanation: Continued activity to build-up two AMSC Subcommittees: Cyber and Intelligence. Both subcommittees were very active in 2017 with meetings and training sessions.

Accomplishment: Active Shooter TTX.

Explanation: Conducted an Active Shooter Table Top Exercises in the National Capital Region (NCR). Participants included decision makers from several AMSC port partners. Considered very productive in sorting roles and responsibilities in a complex, multi-jurisdictional area.

Accomplishment: Radiation/Nuclear Detection Table Top Exercises.

Explanation: Conducted two Radiation/Nuclear Detection Table Top Exercises (Baltimore and NCR) to identify risks, communicate threats to affected stakeholders, coordinate resources, and mitigating threats and consequences before and after a Transportation Security Incident in the port.

Accomplishment: MTS Cyber Workshop.

Explanation: Conducted a Marine Transportation System Cyber Workshop to familiarize the AMSC members on potential roles and responsibilities as outlined in the AMSP.

Accomplishment: MTS Cyber Resilience Seminar.

Explanation: Conducted a Maritime Transportation Cyber Resilience Seminar (Exercise). This cyber resilience exercise was a half day facilitated discussion-based seminar designed to introduce cyber security stakeholders and practitioners to cyber resilience concepts. The purpose of this exercise was to build capability and capacity across key performance areas related to cyber security, Information Technology (IT) operations, and business continuity within critical services. The Coast Guard worked with the DHS Office of Cybersecurity & Communication National Protection and Programs Directorate to develop the event that was attended by personnel from CG Headquarters, District, Intel units, industry, security, and education partners throughout the region.

North Carolina AMSC**Accomplishment:** Joint Navigation Exercise.

Explanation: The AMSC co-sponsored a discussion-based navigation exercise with the U. S. Department of the Army to include representation from the Army Corps of Engineers. The discussion focused, for the first time in several years, on marine transportation system recovery of the ship channel during a period requiring active and sustained support for Department of Defense overseas contingency operations.

Accomplishment: Cyber Awareness.

Explanation: The Cyber subcommittee sponsored several guest speakers to the committee focusing on education and cyber awareness. Among notable speakers was the Department of Homeland Security Region Cyber Security Advisor. The speakers provided free cyber security assessment tools developed by Argonne National Laboratory for use by the maritime community.

Accomplishment: Shipboard Training.

Explanation: The Law Enforcement subcommittee hosted shipboard training for federal and local agency canine handlers onboard the Coast Guard Cutter DILIGENCE. The training exposed canines and handlers to shipboard environments and increased partner agency interest and support for underway vessel boardings.

Accomplishment: Port Security Grant Program Field Reviews.

Explanation: The Grant subcommittee completed Port Security Grant Program field reviews of 12 investment justifications submitted by AMSC stakeholders, resulting in awards from FEMA totaling \$337,000 to improve port security throughout the COTP zone.

Virginia AMSC

Accomplishment: RAD/NUC training, equipment and cooperation.

Explanation: With the addition of the Rad/Nuc annex, the AMSC continues to prepare for a joint full-scale exercise in early 2018.

Accomplishment: Cyber training and exercise.

Explanation: A state and federal TTX was very productive and led the way to identifying lessons learned and some areas for improvement, which will be the focus for upcoming FY2018 exercise and meetings.

Charleston AMSC

Accomplishment: Multi-agency operations.

Explanation: The Charleston AMSC planned and implemented a spread of multi-agency and multi-industry operations as part of its CY 2017 strategic plan. Operational intent was to forward mutual public safety and security goals while expanding partnerships and increasing operational efficacy through intelligence and information sharing across COTP/FMSC zones within the Sector Charleston AOR.

Accomplishment: Dirty Bomb.

Explanation: On 15 June 2017, Sector Charleston Command Center received notification of a dirty bomb aboard MAERSK MEMPHIS (US), a container ship preparing to berth at Wando Terminal in the Port of Charleston. The nuclear/radiological detection and response annex of the AMSP was activated while AMSC members and other agency representatives deployed to the SeaHawk IOC. Partners initiated joint operational planning and joint intelligence/information sharing while radiological/nuclear detection-capable agencies deployed to establish and enforce a safety zone both on land and on-water, evacuate the terminal, establish local command, control, and coordination, conduct detection activities, determine the presence of a threat, and locate and remove the subject containers. The following agencies were involved with the response: USCG Sector Charleston, CGIS, Maersk Ship Management and ship's crew, CBP, South Carolina Law Enforcement Division (SLED), SLED bomb squad, 43rd CST, FBI JTTF, SC Ports Authority, Mount Pleasant Fire Department, and Charleston County Sheriff's Office. The response occurred in four distinct stages. Stage one consisted of wide-area radiation scans of the entire vessel provided by a Charleston County Sheriff's Office marine unit equipped to detect radiation sources to which none were detected. Stage two consisted of the South Carolina National Guard's 43rd CST boarding the vessel alongside Mount Pleasant Fire Department who together provided radiation scans around the suspect containers, all of which indicated no alerts. Stage three involved the removal of four suspect containers from the vessel to a pier side staging area where the 43rd CST and CBP teams used a High Energy MSX Truck, which detected Thorium 232 and Chloride Potassium on two containers. A WMD team from the FBI assessed the hits as low threat as reach-back determined the sources as naturally occurring radiation. The fourth stage included a CBP x-ray of all containers later found consistent with manifests. Having exhausted investigative and detection means, the COTP determined the containers did not present a threat.

Accomplishment: 2017 Total Solar Eclipse.

Explanation: The AMSC was heavily involved with planning for the 2017 Total Solar Eclipse, the path of which crossed directly overhead the Charleston COTP/FMSC zone. The AMSC supported and formally advised the COTP on the potential for maritime impacts to public safety and security, as well as potential impacts to commercial activity in and around the Port of Charleston. A maritime Unified Command and incident

management team, comprised of AMSC and SeaHawk partners, was established on the SeaHawk watch floor where operational planning saw resource support involving 83 personnel from 18 agencies who provided 35 first responder vessels. On-water presence by public safety and other law enforcement agencies provided the prepared means to address multiple kinds and types of emergencies from general law enforcement, to mass rescue, to mass evacuation despite a literal doubling of South Carolina's state population and with Charleston area hotels at historically high occupancy rates, many reaching between 96-100% over a three-day period. Enclosure (2) provides an example of a 2017 Total Solar Eclipse Incident Action Plan (IAP) developed using the Coast Guard's Incident Management System Software (IMSS).

Accomplishment: Hurricane Irma.

Explanation: Hurricane Irma brought hurricane force winds and seas to the Charleston COTP/FMSC zone on 11 September 2017. Well prior to landfall, the AMSC advised the COTP/FMSC on port and other industry concerns to include the timing of setting hurricane Port Conditions. Routine AMSC consultations resulted in a projected timeframe for setting Port Conditions with associated controls over vessels and facilities. Additionally, the Maritime Transportation System Recovery Unit (MTSRU) was established with linkages to the AMSC who worked in collaboration to plan and understand the flow of post-storm port assessment team activities. Post-hurricane surveys of the port were conducted jointly within a few hours after tropical storm force winds subsided, and the port was open without restrictions. Enclosure (3) provides an example of Sector Charleston's Hurricane Irma IAP using IMSS.

Accomplishment: Cyber Information Sharing.

Explanation: The Cyber Subcommittee became the most active and fastest growing subcommittee, presently at 73 members, given recognition of evolving cyber threats across the maritime domain. The Subcommittee is comprised of a diverse spread of public, private, and non-governmental agencies and organizations, to include academia, that together contain the means to think critically and analytically about the cyber security problem and potential administrative and/or physical solutions. Routine meetings and other collaborations included guest speakers from the White House National Security Council, US Army Cyber Command and Cyber Center of Excellence, and US Coast Guard Cyber Command. Of significance, the Cyber Subcommittee leveraged the Port Security Grant Program to establish a novel maritime-based cyber information-sharing portal, where the newly established Maritime Transportation System - Information Sharing and Analysis Organization (MTS-ISAO), created by Charleston AMSC members, will improve the region's maritime logistics supply chain cyber security posture in policy and in practice. The MTS-ISAO delivers cyber solutions through routine multi-agency and multi-industry collaborations on emergent cyber security and response topics, as well as implementation of cutting-edge, cost-conscious, and user-friendly technical solutions. Additionally, the Cyber Subcommittee is formally integrating Homeland Security Information Network as a primary tool for knowledge

management and resource sharing within the MTS-ISAO community and across other ISACs, ISAOs, and Cyber Security and Communication Integrations Centers.

Accomplishment: Marine Firefighting & Salvage Course.

Explanation: The Marine Firefighting Subcommittee, in collaboration with the American Salvage Association, hosted a three-day salvage and marine firefighting training and tabletop exercise attended by over 40 public safety, marine firefighting, and commercial salvage professionals. Attendees traveled from multiple COTP/AMSC zones throughout CGD7 and CGD5. Attendees spent two-days learning from senior salvage industry executives and practitioners on the business of salvage, casualty assessment, salvage engineering, marine firefighting, heavy lift, emergency towing, commercial dive operations, emergency lightering, regulatory requirements, and other salvage marine firefighting topics. The final day included a tabletop exercise featuring a locally based incident with implementation of the marine firefighting annex to the AMSP. The three-day event resulted in enthusiastic support for a series of larger scale marine firefighting workshops and TTXs currently in the design and planning phases for implementation in Q3 of 2018.

Accomplishment: ALASTAR.

Explanation: The Charleston AMSC Communication Subcommittee collaborated with the Charleston County Consolidated Dispatch and 911 Center to leverage Port Security Grant Program funds for a new common operational picture (COP). The system, named Alastar, delivers real-time situational awareness with analytic and predictive modeling capabilities by integrating real-time end-user inputs (app-based), 911 calls, first responder automatic vehicle location information, live weather data, infrastructure status, and public/private video feeds. The cumulative output drives daily operational use by participating agencies in a field or command post/watch floor setting. The information is shared with AMSC and SeaHawk IOC partners providing personnel with real-time awareness and analysis of the maritime domain as the primary COP used for information and intelligence gathering, as well as for operations of all kinds to include planned events like the annual 45,000-person Cooper River Bridge Run to which the AMSC provides advice and guidance to the COTP/FMSC, as well as incident management support through the IOC and Intelligence Subcommittee. The Communications Subcommittee in 2017 expanded Alastar's functionality by adding 58 cameras providing real-time and on-demand video coverage for an additional 30% of waterways within the Charleston COTP/FMSC zone. Additionally, the Communications Subcommittee developed app-based "forms" enabling rapid reporting of Aids to Navigation status (for example, pre and post hurricane or tropical storm), public safety and law enforcement vessel boardings, MCIKR patrols, derelict vessel notifications and updates, and radiation sweep activities and outcomes. The lessons learned and enhancements made to Alastar based on the recommendations from members of the Charleston AMSC are now utilized with our adjacent AMSC, as well as CGD7.

Florida Keys AMSC

Accomplishment: Hurricane Irma.

Explanation: Port Recovery and Reconstitution. The Port of Key West was shut down for 7 days following Hurricane Irma. The MTSRP was fully exercised during the Hurricane Irma response.

Accomplishment: CCTV.

Explanation: CCTV installed on local facility, promotes security awareness, and provided access to local Coast Guard to observe facility remotely

Northeast and Eastern Central Florida AMSC

Accomplishment: MSRAM Validation.

Explanation: AMSC members participated in the CG's 2017 MSRAM data validation effort by identifying new/changed port Infrastructure/operations and providing subject matter expertise to follow-on vulnerability and consequence analysis.

Accomplishment: PSGP.

Explanation: The AMSC coordinated efforts with local stakeholders to execute the FY 2017 PSGP. Investment justifications were reviewed, ranked and submitted to FEMA. The projects will increase the ports resiliency to MTS disruptions.

Accomplishment: Cybersecurity Workshop.

Explanation: In February 2017, the AMSC sponsored and conducted Cybersecurity Workshops in Jacksonville and Port Canaveral. The After Action Reports and Lessons Learned were uploaded to the Contingency Preparedness System (CPS) database.

Accomplishment: Active Shooter Full Scale Exercise (FSE).

Explanation: In June 2017, the AMSC sponsored and successfully conducted an "Active Shooter" FSE, in Port Canaveral, FL. The After Action Reports and Lessons Learned were uploaded to the Contingency Preparedness System (CPS) database.

Puerto Rico and US Virgin Islands AMSC

Accomplishment: Port Security Grant Program.

Explanation: A combined 27 Investment Justifications (IJ's) submitted to FEMA for FY2017 Grant funding. A substantial increase from the previous year submissions. Received close to a million dollars for the MTS projects with the local port authorities.

Savannah AMSC**Accomplishment:** AMSTEP TTX.

Explanation: On January 20, 2017, the AMSC conducted an AMSTEP Tabletop Exercise (TTX) focused on the MSU Savannah Area Maritime Security Plan (AMSP) protocols, port vulnerability and resilience to a post-response Transportation Security Incident (TSI) that closed the Savannah River Marine Transportation System. The exercise evaluated the AMSP in the critical areas of security, communications, MARSEC Levels (Maritime Security) mitigation strategies and short term Marine Transportation System Recovery. The exercise strengthened port security, interagency collaboration and provided an opportunity to enhance the AMSP, Facility Security Plans and community planning efforts. This exercise promoted other maritime terrorism nexus exercises parallel to the AMSTEP. Georgia State Emergency Management Agency and Georgia Ports Authority have sponsored a series of exercises (Seminar in late 2017 and a Tabletop Exercise is planned for CY2018) leading up to the CY2019 AMSTEP Functional Exercise. Concurrently, Imperial Sugar, a Savannah River MTSA regulated facility, is working to sponsor their own Maritime Terrorism discussion-based exercise to look at partner incident response coordination, plan gap mitigation and possible development of MOU/MOAs. Since the CY2017 AMSTEP TTX, Imperial Sugar has mitigated a critical resilience gap by expanding its rail line and pre-staging empty rail cars on their facility as a contingency to a river shut down.

Accomplishment: Cyber Security Awareness.

Explanation: Adding Cyber Security to all AMSC meeting agendas promoted Facility and agency Cyber Security awareness and discussion.

Accomplishment: PIO Social Media gap in IMT filled.

Explanation: AMSC collaboration and partnership helped fill Incident Management Team PIO Social Media gap. If Social Media monitoring or use is needed during an event/incident, Chatham County Emergency Management Agency (EMA) and/or Metro Police have Social Media SMEs on staff that are able to support this role.

Southeast Florida AMSC**Accomplishment:** Cyber Security Subcommittee.

Explanation: Established a working Cyber Security Subcommittee for SE FL - AMSC. The South East Florida Area Maritime Cyber Security Subcommittee held its first meeting on October 17, 2017. The draft NVIC 05-17 provides guidance and recommendations for MTSA regulated facilities to address cyber vulnerabilities with computer systems and networks of MTSA regulated facilities. It also provides the footing that allows for a forward leaning approach to address these vulnerabilities until more specific management regulations are promulgated. Enclosure (2) of the NVIC provided a recommended a foundation for the development of a cyber risk program. This

framework called for the identification of an administrative structure for cyber risk management, protection of systems from failure and exploitation, procedures to detect when systems have become compromised, response procedures to limit consequences of a cyber event, and follow up actions needed to restore full functionality after a cyber incident. It is the intent of this cyber security subcommittee to address these areas and create strategies to mitigate risks posed to MTSA regulated facilities throughout Sector Miami's area of responsibility.

Western Florida AMSC

Accomplishment: Completion of the PRND CONOP.

Explanation: The process of coordinating efforts to produce a common PRND CONOPS amongst various maritime law enforcement agencies along wester coast of Florida was completed this past year.

Houston-Galveston AMSC**Accomplishment:** Grants.

Explanation: The Houston-Galveston AMSC Port Security Grants Sub-committee successfully reviewed 44 grant requests (up from 37 in 2016) totaling \$21M and assisted AMSC members in the attainment of \$8.96M (up from \$6.1M in 2016). Both the Houston-Galveston maritime industry and local government organizations were well represented in the final FEMA approvals.

Accomplishment: Interoperability.

Explanation: Interagency Operations Center: The Sector Interagency Operations Center (IOC) continues to maintain grow and mature through the active participation of AMSC member agencies including CBP's Offices of Field Operations and Air and Marine, Transportation Security Administration, and Texas Parks and Wildlife. These efforts have proven beneficial in the prosecution of several joint law enforcement and search and rescue operations. Sector Houston-Galveston will continue to pursue representation from these and additional partner agencies in 2018 and beyond.

Gulf of Mexico AMSC**Accomplishment:** Cyber Security Exercise.

Explanation: In CY 17, the AMSC successfully executed a well-attended cyber themed tabletop exercise. The Exercise committee collaborated with the DHS National Cyber Exercise and Planning Program and the Maritime & Port Security Information Sharing and Analysis Organization (MPS-ISAO) to execute the tabletop. The event was attended by numerous federal and state agencies interested in cybersecurity as well as the offshore industry. Importantly, the exercise was the first time that both offshore Information Technology (IT) and Operational Technology (OT) personnel participated together in a cyber exercise greatly increasing awareness of the challenges faced by both disciplines in the event of an offshore cyber event. The tabletop led to discussions and identified courses of action and best practices that were consolidated into the tabletop after action report. Those recommendations were taken and used to update the AMSP to address cyber security.

Mid-South AMSC**Accomplishment:** Passenger Vessel MARSEC Incident Response TTX.

Explanation: 14 February 2017, Maritime Security Regional Sub-committee (MSRS) Western Mississippi conducted a tabletop exercise (TTX) in which an armed, coordinated attack occurred onboard a moored passenger vessel in the Vicksburg port area. The TTX tested the AMS Plan in accordance with the Area Maritime Security Training and Exercise Program. Local plans were also tested.

Accomplishment: Passenger Vessel MARSEC Incident Response Workshop.

Explanation: 27 April 2017, Maritime Security Regional Subcommittee (MSRS) Memphis conducted an Active Shooter Incident Workshop onboard a passenger vessel. The purpose of the Workshop was to educate local first responders on the types of passenger vessels operating in the port area and passenger vessel operations. Response information was collected from local first responders and the marine industry in drafting a MARSEC Incident Response Plan in compliment of the Memphis port area's Mass Rescue Operations (MRO) Response Plan.

Accomplishment: NUC / RAD Detection Drill.

Explanation: 24 September 2017, MSRS Arkansas conducted a Joint Agency MARSEC drill on the Arkansas River, in the Little Rock port area, involving over 140 first responders, response vehicles, six response boats, and a towing vessel provided by an AMSC member organization, used as the drill venue. The drill tested the new Preventive Radiological Nuclear Detection Annex of the Mid-South AMS Plan.

Accomplishment: Passenger Vessel Mass Rescue Operations (MRO) TTX with a MARSEC nexus.

Explanation: 08 November 2017, MSRS Western Mississippi conducted the first ever MRO TTX in the Vicksburg port area, but marking the fifth MRO exercise for the COTP Zone since 2013. The security issues that were identified during the TTX were addressed. The local MRO Response Plan and the new Sector LMR MRO Supplemental Plan were tested.

New Orleans AMSC

Accomplishment: Formalized a process to address Port Security Grant Program (PSGP) fund reallocation.

Explanation: The New Orleans AMSC formalized a process to address Port Security Grant Program (PSGP) fund reallocation requests by grant recipients. Occasionally, unforeseen factors, such as partial funding or increased project cost limit grant recipient's ability to fulfill projects as originally proposed. As a result, recipients seek permission from the Federal Emergency Management Agency (FEMA) PSGP Analysts to reallocate awarded funds to redesigned security projects. Sector New Orleans received three such proposals this year. The AMSC PSGP Subcommittee, replicating the vetting process for Fiscal Year Investment Justifications, reviewed these requests. Based on the subcommittee recommendations, the COTP provided recommendations to FEMA. Approximately \$1.3M of PSGP funds were approved for reallocation to enhanced security projects.

Accomplishment: AMSC sponsored/facilitated Annual Full Scale Exercise

Explanation: The Lower Mississippi River Security Working Group has conducted annual port-wide exercises aimed to test facility security plans for the past several years.

On average, 75 facilities and vessels located in Sector New Orleans COTP zone were involved. These exercises raise awareness and improve notification procedures in event of suspicious incidents, and MARSEC level changes, for facilities and vessels across the region. In addition, participants have the opportunity to fulfill the annual exercise requirements set forth in 33CFR 104.230 and 105.220.

Northeast Gulf of Mexico AMSC

Accomplishment: PSGP.

Explanation: Intensive outreach for the Port Security Grants Program (PSGP) for 2017 was successful. All five of Sector Mobile's AMSC Sub-committees were actively engaged and outreach efforts were instrumental in encouraging participation and assisting with the timely execution of the 2017 PSGP under revised FEMA guidelines and short fused deadlines. Three of the five port areas received PSGP funding this past year. There were four applicants with 5 out of the 14 Investment Justifications funded for a total of \$853,721 for COTP Zone Mobile.

Accomplishment: MSRAM.

Explanation: The AMSC Subcommittees were also utilized to assist with updating information for the 2017 Maritime Security Risk Analysis Model (MSRAM) annual revalidation cycle. Changes in threat index scoring methodology adopted for MSRAM in 2016 led to a localized Metropolitan Statistical Area (MSA) threat index factor. This changed the evaluation of risk and required extensive outreach to regulated entities and subcommittees by PSSs to conduct significant reviews of targets for re-assessments based on annual threat index changes. Significant data was gathered from stakeholders and appropriate Subcommittee members as part a of a Risk Management Workspace (RMW) evaluation of select CDC targets for plume modeling and pathway analysis updates during this cycle. Funding of updates to MSRAM was curtailed for FY17, so a select group of D8 PSSs spent time developing an analysis of revisions to the tool, which would enhance its applicability and granularity for determining risk with limited funding requirements for future needs.

Accomplishment: Cybersecurity.

Explanation: Cybersecurity remains continuing theme for the subcommittees and various representatives presented Cyber Awareness topics at several subcommittee meetings. PSSs continued to distribute Cyber Security Evaluation Tools (CSET) from DHS to stakeholders for self-assessments as a part of the cyber awareness campaign. Outreach continued in the Pensacola, FL area. For example, provided information and how to link with the DHS National Cybersecurity and Communications Integration Center (NCCIC) as a resource for Cybersecurity. Individual AMSC Subcommittees were not interested in creating an overall Cyber Subcommittee because the topic was covered sufficiently in existing meetings.

Accomplishment: Unmanned Aerial Vehicle (UAVs).

Explanation: Unauthorized unmanned aerial vehicle intrusion of air space over several MTSA regulated facilities and US Navy vessels at construction facility were reported in 2017. Discussions held at AMS Sub Committee meetings were used to educate members on federal and state regulations governing drone usage and what actions if any may be taken. The State of Florida has recently passed legislation making drone users criminally liable for knowingly, and willfully flying drones over critical infrastructure to include chemical manufacturing or storage facilities.

Accomplishment: Annual Meeting.

Explanation: The Annual AMSC meeting held during December 2017 was a success with over 55 participants and included a special presentation by the Alabama National Guard Civil Support Team/Weapons of Mass Destruction Team. Information on support capabilities can be used as a force multiplier in MTS disruptions due to WMD incidents.

Accomplishment: AMSTEP.

Explanation: A highly successful AMSTEP Table Top Exercise was held in Panama City, FL on August 29, 2017. The purpose of the exercise was to demonstrate the ability for the Panama City AMS Sub-Committee, USCG Sector Mobile, and various stakeholders to initiate actions in response to a Transportation Security Incident (TSI) within Panama City's port area utilizing the AMSP and the Port of Panama City Annex. Exercise play included communications between and the anticipated response of stakeholders to a Transportation Security Incident within the Panama City port area. Discussions involved: (1) how interagency communications are conducted; (2) how supporting agencies will respond to a TSI; and (3) implementation of a MARSEC change. There were 46 participants representing 16 stakeholder agencies involved in the exercise. It was considered a great success by the participants and helped to improve coordination and renew partnerships between stakeholders in the Panama City area.

Accomplishment: Preventative Radioactive/Nuclear Detection (PRND) Program.

Explanation: After initial briefings and consultation in December 2016 with the DHS Domestic Nuclear Detection Office (DNDO), detailed CG personnel, and the Department of Energy (DOE), it was decided to embark on the development of a Preventative Radioactive/Nuclear Detection (PRND) Program for the AMSP Section 5532 for Sector Mobile's AMSP. A PRND working group was established from the AMSC membership to utilize the provided DNDO framework to develop the local PRDN Plan. This work group was comprised of Federal, State, and Local Law Enforcement entities, their Weapons of Mass Destruction (WMD)/Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) responders, and WMD plan holders. Personnel conducted both face-to-face and teleconference meetings to accomplish this goal. Over the course of 2017, this plan was drafted, revised, reviewed and completed in December 2017. Final approval prior to publication and inclusion into the AMSP is pending.

Accomplishment: TWIC Reader Rule.

Explanation: The AMSCs were utilized to disseminate information on the new TWIC reader rules, revised facility definitions, and implementation requirements to MTSA regulated owner operators and Facility Security Officers. This was an excellent opportunity to get feedback and concerns from the field back to CG FAC, and was noted as very successful by all participants.

Ohio Valley AMSC**Accomplishment:** Virtual Critical Asset Tour (VCAT).

Explanation: In February and March 2017, the Louisville AMSC coordinated visits to the Ports of Louisville and Owensboro with security specialists from the Department of Defense (DOD) and CG-PSA. The purpose of these visits was to conduct a Port Security Resiliency Assessment (PSRA) and VCAT assessment of high-risk critical infrastructure in each port. Portions of the PSRA and the VCAT are available to AMSC members providing highlights on security strengths and vulnerabilities.

Accomplishment: RAD/NUC.

Explanation: In February 2017, RAD/NUC Detection (RND) Quick Start training sessions were conducted in the Ports of Florence and Decatur, Alabama, Owensboro and Louisville, Kentucky, and Cincinnati, Ohio. The Department of Homeland Security Domestic Nuclear Detection Office (DNDO) and State RND agencies taught the sessions for coalition law enforcement and fire/rescue agencies that operate watercraft and conduct maritime patrols within SOHV's AOR.

Accomplishment: CONOPS.

Explanation: The Paducah AMSC completed the process of identifying agencies, developing Concept of Operations (CONOPS) and standard operating procedures, training personnel, and deploying detection equipment in support of the preventive Radiological/Nuclear mission adopted on the Western Rivers. MSU personnel worked directly with representatives from the DNDO and Oak Ridge National Laboratory from October 2015 -February 2017.

Accomplishment: Cyber Security Workshop.

Explanation: On 15 March 2017, the Cincinnati AMSC hosted a Cybersecurity Workshop (WS). The Department of Homeland Security (DHS) National Cybersecurity and Communications Integration Center conducted the WS to offer awareness level cybersecurity training for Cincinnati AMSC members. The Cybersecurity WS included a discussion of the cyber threat, and offered suggested measures to help prevent economic consequences and address public safety concerns during a cybersecurity attack on the maritime domain in the Port of Cincinnati.

Accomplishment: Keynote Speaker.

Explanation: The Port of Paducah AMSC secured the LT Governor of Kentucky as the keynote speaker at the AMSC meeting on June 22, 2017. The LT Governor spoke on the importance of the maritime industry to the state of KY and the contributions that our mariners make.

Accomplishment: AMSTEP Seminar.

Explanation: On 12 July 2017, the Louisville AMSC conducted an AMSTEP Seminar (SEM) exercise in the Port of Louisville to evaluate elements of the Ohio Valley AMSP and the Port of Louisville Annex. The focus of the AMSTEP SEM was to discuss a law enforcement response to a Transportation Security Incident occurring on the Ohio River in the Port of Louisville. The Ohio Valley AMSP and Port of Louisville Annex were updated using exercise lessons learned.

Accomplishment: AMSTEP Workshop.

Explanation: On 26 July 2017, the Nashville AMSC conducted an AMSTEP WS exercise in the Port of Nashville to evaluate elements of the Ohio Valley AMSP and the Port of Nashville Annex. The focus of the AMSTEP WS was a discussion of a law enforcement response to a Transportation Security Incident occurring on the Cumberland River near the Old Hickory Lock and Dam. The Ohio Valley AMSP and Port of Nashville Annex were updated using exercise lessons learned.

Accomplishment: VCAT Assessment.

Explanation: On 30 & 31 August 2017, the Cincinnati AMSC coordinated a law enforcement surface and aerial VCAT assessment of the Ohio River in the Port of Cincinnati; CG-PSA and DOD security specialists of high-risk critical infrastructure in the port conducted it. The Port of Cincinnati VCAT assessment is available for use by coalition law enforcement and fire/rescue agencies in the region.

Accomplishment: Boat Drills.

Explanation: On 19-21 September 2017, the Louisville AMSC conducted three days of boat drills with other governmental agencies (OGAs). The drills included patrol boat approaches to a moving commercial towing vessel, man overboard drills, tactical and K-9 team boarding of commercial towing vessels, RND screening operations on commercial barges and towing vessels, and tank barge familiarization for coalition law enforcement and fire/rescue agencies. Ten OGAs participated and over 100 officers attended the three days of drills.

Accomplishment: PSGP Presentation.

Explanation: On 7 November 2017, Mr. Duane Davis from the Federal Emergency Management Agency provided a presentation on the Port Security Grant Program (PSGP) to members of the Nashville AMSC. The presentation provided AMSC members information on the PSGP application process, and the 2018 PSGP.

Accomplishment: Projects.

Explanation: In CY17, SOHV AMSCs requested \$7,244,529, and were allocated \$1,639,687 in Port Security Grant Program funding for security enhancements, and these projects are currently being implemented by AMSCs within the SOHV AOR.

Accomplishment: MSRAM Target Rescore.

Explanation: In CY17 MSU Paducah conducted an in-depth rescore of Maritime Security Risk Analysis Model (MSRAM) targets using updated economic numbers provided by the U.S. Army Corps of Engineers resulting in significantly improved allocation of CG resources and supporting HQ-level maritime security mission requirements.

Accomplishment: Security Course.

Explanation: In CY17 SOHV utilized the Texas A & M Engineering Extension Service (TEEX) and the Rural Domestic Preparedness Consortium to host multiple relevant security courses, including physical and cyber security training annually. Additionally, the incorporation of cyber security training and presentations at AMSC meetings encourages industry to share their cyber best practices and challenges/solutions, providing valuable information to AMSC members.

Accomplishment: Outreach.

Explanation: In CY17, SOHV AMSCs continued to boost outreach efforts on security vulnerabilities in the area of cybersecurity. SOHV PSSs began training at AMSC meetings on draft CG cybersecurity Navigation and Inspection Circular (NVIC) 05-17, which provides guidelines for addressing cyber risks at Maritime Transportation Security Act (MTSA) regulated facilities.

Pittsburgh AMSC**Accomplishment:** Membership Increase.

Explanation: AMSC Pittsburgh increased significantly with the addition of the Facility Security Officers, numerous municipalities, EOC's, police and other partnering agencies. Roles have increased from approximately 80 members and 40 partnering agencies in 2016 to 147 members and 60 partnering agencies in 2017.

Accomplishment: AMSC Workshop.

Explanation: A first ever AMSC Workshop was conducted for MSU Pittsburgh. This is a part of an Executive Committee and membership request to gain new membership and update current partners. In a town hall format, members were briefed on the Port Security Grant Program, HSIN, TWIC, Fusion Centers and Three-Rivers-Waterways issues among many other issues.

Accomplishment: Functional Exercise.

Explanation: On September 21, 2017, the yearly AMSTEP exercise was conducted in the Beaver Township PA EOC. The first exercise the new facility sponsored. The state of the art facility hosted 32 agencies and over 55 members. The exercise planning and admin task consumed approx. 500 hours and numerous coordination meetings allowing for a successful exercise.

Sabine-Neches AMSC

Accomplishment: PSGP 2017.

Explanation: The Sabine-Neches Executive Steering Group, Southwest Louisiana regional subcommittee, and Grants Sub-committee successfully assisted AMSC members in the attainment of \$4,263,600 in FY17 Port Security Grant (PSG) funds, totaling 21 project awards for 11 applicants within the COTP zone. Continued success in the competitive PSG program allows maritime stakeholders the ability to strengthen and maintain our security posture.

Accomplishment: Marine Firefighting Salvage & Recovery.

Explanation: As referenced in the CY2016 AMSC Annual Report, improved marine firefighting mitigation capabilities were demonstrated at two major marine fires in CY2017. This success was attributed in part to the improved regional capabilities achieved under the Marine Firefighting Salvage & Recovery AMS Subcommittee's achievements.

Accomplishment: Maritime Security.

Explanation: The Maritime Security Subcommittee, in conjunction with the Southeast Maritime Operations Committee (SEMOC) conducted a total of thirteen joint meetings and maritime security field operations in CY2017. Coordination included support from members of the Maritime Domain Awareness (MDA) Subcommittee, Vessel & Facility Security (VFSO) Subcommittee, and at-large Committee membership. Activities were coordinated in alignment with the Regional Coordinating Mechanism (RECOM).

Saint Louis AMSC

Accomplishment: Incident Command System TTX Exercise.

Explanation: The Kansas City AMSC successfully completed an AMSTEP Tabletop Exercise and built upon previous AMSTEP iterations. The AMSC tested the ability to manage a large-scale response event using multiple Emergency Operation Centers and determined it was more effective to integrate the command response to the affected jurisdiction to facilitate multiple operational period planning. The AMSC initiated plans to conduct a Functional Level exercise in 2018 to address gaps identified in its regional Coordinated Complex Terrorist Attack (CCTA) Workgroups. Last summer the Kansas City Mid-American Regional Council received a \$2.5M federal grant to enhance planning and training to counter a CCTA event.

Accomplishment: Communications Working Group.

Explanation: The Peoria AMSC continued to gain momentum in 2017, after a season of relative inactivity caused by impacts from real-world events and turnover of key leaders. The AMSC committed to influence coordination activities for regional exercise planning and initiated development of a comprehensive regional radio communications plan.

Accomplishment: Coordinated Complex Terrorist Attack Full-Scale Exercise.

Explanation: The Quad Cities AMSC conducted the first Full-Scale Exercise involving a CCTA scenario involving attacks at multiple critical infrastructure assets located throughout the port-wide area. The event involved over 50 agencies and approximately 270 participants. The exercise captured significant regional vulnerabilities to include the lack of a common operating picture for information sharing and interagency communications for on-scene command and control. The AMSC leadership initiated actions to use the event to underpin support from both respective State Homeland Security agencies to pursue funding needed to address training and resource gaps.

Accomplishment: Maritime Industry Cyber Workshop.

Explanation: The St. Louis AMSC successfully completed a Maritime Cybersecurity Industry Workshop for public and private partners. The workshop was designed to increase awareness, review best practices and identify strategies to protect local networks, critical infrastructure and intellectual property. The AMSC continued to address significant criminal activity including gun violence near Maritime Transportation Security Act (MTSA) regulated facilities along the St. Louis riverfront. The FMSC pushed for development of an AMSC working group to meet with senior-level city officials to address these problems.

Accomplishment: Senior Leader Seminar/TTX Exercise.

Explanation: The Upper Midwest AMSC continued to inform regionally elected and appointed officials of the AMSC's role during a disruptive river event and the potential economic impacts it could have on the local economy. The AMSC conducted a Senior Officials Workshop followed by an AMSTEP Tabletop Exercise focused on an integrated regional response to an intermodal transportation event involving a simulated rail incident spilling an unregulated liquid into the Upper Mississippi River. Approximately 60 senior and elected officials attended the Workshop and over 140 emergency responders participated in the Tabletop event.

South Louisiana AMSC**Accomplishment:** Interagency Operations Center Bi-Weekly Briefings.

Explanation: DHS partner agencies conduct twice-weekly telephone conference briefings to address Maritime Domain Awareness (MDA), joint operations, and force multiplication. Coast Guard, CBP, and CBP's Office of Air and Marine (OAM) discuss vessel boardings, harbor patrols, vessel arrivals, and crew makeup.

Accomplishment: Port Security Specialist Network.

Explanation: MSU Houma PSSs maintain regular communications, including meetings, email, and phone conferences with D8, Sector New Orleans, MSU Baton Rouge, MSU Lake Charles, MSU Port Arthur, and other Sectors across the nation to ensure consistency in AMS related topics, intel, and lessons learned.

South Texas AMSC

Accomplishment: AWR-144 Course.

Explanation: The South Texas AMSC sponsored two convening's of the newly created Port and Vessel Security for Public Safety and Maritime Personnel course (AWR-144) facilitated by the University of Findlay. This was the result of collaboration between the committee and the Federal Emergency Management Agency, the Rural Domestic Preparedness Consortium, and the University of Findlay. Nearly 100 area first responders received this valuable training which focused on basic competencies associated with both port and vessel security.

Accomplishment: InfraGard Expansion.

Explanation: The AMSC was instrumental in the expansion of the Houston InfraGard Chapter into Corpus Christi and the addition of a Coastal Bend SIG.

Accomplishment: Port Mansfield Security Improvements.

Explanation: The AMSC continues to work with key stakeholders to improve security at Port Mansfield. The following has been accomplished to date: (1) Addition of Maritime Intelligence Estimate to the Annex 9500 Area Maritime Security Assessment; (2) Engagement with the Lower Rio Grande Valley Development Council (LRGVDC) to help steer grant funds to Willacy County; (3) Engagement with DHS NPPD for security assessment assistance; (4) Design of AMSTEP exercises to test response at Port Mansfield; & (5) Engagement with key maritime LE stakeholders to focus efforts on protecting Port Mansfield and surrounding waterways.

Eastern Great Lakes AMSC**Accomplishment:** Executive Board Training at Alternative Location

Explanation: Completed a commitment to the community to conduct a board meeting remotely (i.e., out of the Cleveland area, proper); On October 26, 2017, North East Ohio Regional Area Maritime Security Subcommittee (NEORAMSS) held an Executive Board [EB] meeting at the Lorain Port Authority. The meeting was well attended. After the official business was completed, an Awareness level Seminar was held to introduce the COE 5713 exercise program leading up to an exercise in April 2018. Intend to hold some future EB meetings at other remote ports in Northeast Ohio.

Accomplishment: Full Scale Law Enforcement (LE) Exercise.

Explanation: Conducted a Full Scale LE exercise utilizing a USCG Cutter suspected of having a parasitic device attached to the hull while transiting the St. Lawrence Seaway System. LE agencies from the Lake Ontario Tactical Operations Group (LOTOG) comprised of local, county, state, federal and Canadian entities participated in the Full Scale exercise to order the vessel to anchor, control a safety zone around the vessel, and conduct dive operations and side-scan sonar to detect the device with the New York State dive team.

Accomplishment: USS Little Rock Commissioning.

Explanation: Western New York Regional (WNYR) AMSS had significant involvement in the planning and establishment of waterside security details for the USS Little Rock while it was in the port of Buffalo. This detail required the use of eight federal, state and local agencies and their boats utilizing 68 different agents, officers and deputies to cover the security requirements of the US Navy. The WNYRAMSS partners were crucial to the success of this operation.

Accomplishment: Pre-Planning Tall Ships 2019.

Explanation: The Northwestern Pennsylvania Region (NWPAR) AMSS is planning to incorporate a PRND exercise and applicable IAP elements into the upcoming real world planning and execution of Tall Ships Erie 2019 scheduled for 22-25 AUG 2019. Tall Ships Erie 2019 planning with NWPARAMSS federal, state and local partners will commence mid-summer 2018. The Committee members have met to ensure the objectives will align with the AMSTEP program.

Lake Michigan AMSC**Accomplishment:** Embedded Exercises.

Explanation: Sector Lake Michigan began an initiative to embed a discussion-based exercise with AMSC meetings using a high-risk TSI scenario. This enhanced mutual understanding of responders' jurisdictions, plans, and capabilities for maritime incidents. This also significantly improved interagency dialogue during and after meetings.

Sault Region AMSC

Accomplishment: 800 MHz Integration/Interoperability Project.

Explanation: USCG Sector Sault Ste Marie and Mackinac County Emergency Management/911 completed an 800MHz integration/interoperability project to assist in tactical coordination between USCG and local/state resources. This project enhances communications, sharing of information, and force readiness response for all hazards throughout the region.

Accomplishment: Cybersecurity Partnership.

Explanation: In 2017, the Sault Region AMSC established a partnership with Michigan's Department of Technology Management and Budget for cybersecurity-related issues/training. This partnership enhances the committee's subject matter expertise in cybersecurity, which has been a glaring deficiency in the past. The State of Michigan is at the leading edge of cybersecurity efforts and has the ability to provide training or advice on many cybersecurity related topics. The partnership built between the AMSC and the state will be invaluable to regional cybersecurity efforts for years to come.

Accomplishment: 2017 Port Security Grant Program.

Explanation: The Sault Region AMSC continues to respond well to the Port Security Grant Program. A number of factors, to include, past success, word of mouth, and effective communication resulted in the highest number of applications in 2017 that the committee had ever seen.

Southeast Michigan AMSC

Accomplishment: Workshop.

Explanation: AMSC conducted an Area Maritime Security Training and Exercise Program Workshop with Federal, State, Local, and International agencies and partners in April 2017. The Workshop developed coordinated response protocols, to include notification procedures for response to a short notice maritime threat event on the international border. The Protocol provides clear coordination relationships and processes between lead and supporting agencies. In addition to developing a Southeast Michigan Maritime Response Operations Coordination Protocol, the Area Maritime Security Committee and Port Stakeholders were able to start development of a tactical resource (equipment and personnel) capability inventory in the greater Detroit area.

Accomplishment: Funds Awarded.

Explanation: Through significant outreach and a detailed field review process, the receipt of over \$1.5M in funds within the FY17 Port Security Grant Program was facilitated within the Southeast Michigan AMSC. The City of Detroit, Michigan State Police, Detroit Riverfront Conservancy, Detroit/Wayne County Port Authority, and County of St. Clair – St. Clair County Sheriffs were all awarded funds that will be used

on worthwhile projects which will increase the port security posture of the local maritime domain.

Accomplishment: RAD/NUC.

Explanation: The Executive Steering Committee of the Western Lake Erie Regional Subcommittee met with Maritime Advisor Pacific Northwest National Laboratory to discuss workgroup recruitment and initial drafting of MSU Toledo Radiological Nuclear Detection (RAD) Standard Operating Procedures (SOP) and Concept of Operation (CONOP) annex for the Southeast Michigan Area Maritime Security Committee (AMSC).

Western Lake Superior (WLS) AMSC

Accomplishment: Outreach

Explanation: Members of the Western Lake Superior AMSC actively promoted attendance and membership during numerous events to include the Homeland Security and Emergency Management Governor's Conference, State Level Incident Command System (ICS) training events, and inter-agency meetings.

Accomplishment: Cyber Security.

Explanation: ALLETE/Minnesota Power, a very active member of the AMSC, developed a regional scenario to be incorporated into the National GridEx IV exercise. Lessons learned from this exercise will be shared with the entire Western Lake Superior AMSC, enabling AMSC members to understand the threats and incorporate prevention and response strategies into their respective cyber security plans.

Accomplishment: Full Scale Exercise.

Explanation: Planned, coordinated and executed a Full Scale AMSTEP to evaluate and validate current AMSP.

Accomplishment: Training.

Explanation: Incident management training attended by key members of the AMSC, who will be members of the Unified Command (UC) in any MTS event, has greatly increased the capabilities and understanding of authorities and priorities for future event impacting the MTS.

Accomplishment: Hot Wash.

Explanation: Conducted a hot wash for real world events, opening avenues of communication and building trust with integral AMSC member agencies.

Accomplishment: Training and Exercise.

Explanation: Calumet Superior Refinery (CER) hosted the AMSTEP Full Scale Exercise provided insight into additional resources to respond to an incident impacting the MTS.

Accomplishment: AMSP updates.

Explanation: The WLS AMSC created and approved a maritime communicable disease response appendix that has been incorporated into the AMSP.

Central California AMSC

Accomplishment: Cyber Security Seminar.

Explanation: Held a one-day cybersecurity seminar on 8 Nov 2017 for 100 port-based cyber practitioners; Concept of Exercise (COE): 10014.

Accomplishment: Port Protector 2017.

Explanation: Held annual AMSTEP 7 Mar 2017: Terrorist Assault Team vs. passenger ferry terminal FSE; COE: 6975.

Accomplishment: Growth of Cyber Security Subcommittee.

Explanation: Increased participation from five in Dec 2015 to over 100 currently.

Accomplishment: Maersk cyber incident response.

Explanation: The 27 June cyber incident involving the Maersk shipping line and APM terminals had worldwide impact. Our Los Angeles APM terminal was unable to move cargo at all for 5 days and was only able to return to computer aided dispatch and loading after 14 days. While Maersk was understandably careful about releasing information on their vulnerabilities and impacts publically, our positive port wide relationships allowed us to invite Mr. John Ochs, General Manager of the APM/Pier 400 terminal complex, to describe the incident impact to our AMSC in public session on 2 August. His transparency and testimonial was compelling and served to set the stage for the necessity of, and positive attendance at, our subsequent Cybersecurity seminar.

Northern California AMSC

Accomplishment: Cyber Guard 2017 – TTX.

Explanation: Participated in Department of Homeland Security's (DHS) Cyber Guard 2017 Prelude Exercise – Sector San Francisco conducted a two-day tabletop exercise to test local port stakeholder procedures that mitigate or recover from various forms of cyber-attacks. Day-1 concentrated on facility security measures, while day-2 concentrated on vessel security measures. Cyber-attack types included; malware, spyware, Industrial Control System (ICS) take-over attacks, GPS spoofing and various forms of phishing attacks. The exercise scenario was in-line with the general theme of the Cyber Guard 2017 Exercise and the results helped DHS's participation in the larger functional exercise the following week.

Accomplishment: Vigilant Guardian 2017 - TTX & FSE.

Explanation: Participated in the Vigilant Guardian 2017 Exercise - Northern California AMSC participated in a major regional, multi-threat, radiological incident, exercise sponsored by the Bay Area Urban Area Security Initiative (UASI). The Captain of the Port (COTP) participated in a daylong Senior Leadership tabletop exercise comprised of locally elected and senior government officials, which discussed regional responses to

multiple terrorist radiological attacks. Sector San Francisco participated in the maritime portion of the weeklong full-scale exercise using radiological detection equipment and observing local law enforcement conduct reach-back procedures. Finally, Northern California AMSC and the FMSC logistically supported the exercise with the use of unit facilities to store exercise materials, provide classroom facilities, and boat dock space for staging law enforcement marine units.

San Diego AMSC

Accomplishment: Re-established Law Enforcement Subcommittee.

Explanation: In 2013, to minimize redundancy between two different Law Enforcement committees, the San Diego AMSC Executive Steering Committee disbanded its Law Enforcement Subcommittee and tasked the San Diego Regional Coordination Mechanism (ReCoM) to function as the LE body to the AMSC Executive Steering Committee (ESC). The re-establishment and expansion of participating agencies on the new LE Subcommittee will provide greater reach and utilization of agencies authorities and capabilities in accomplishing AMSC objectives to enhance security within the San Diego Captain of the Port Zone.

Accomplishment: Re-established Intelligence Subcommittee.

Explanation: In 2013, to minimize redundancy, the SD AMSC Executive Steering Committee disbanded the Intel subcommittee and tasked the ReCoM Intelligence Group (RIG) to function as an informational "Intelligence" body to the AMSC Executive Steering Committee (ESC). The re-establishment of the Intel subcommittee will better align AMSC member agencies intelligence resources with Federal, State, and Local law enforcement, emergency responders and port partners to assess maritime security risk and develop risk mitigation strategies under the leadership of the AMSC ESC. Furthermore, the establishment of an Intel subcommittee charter will provide the structure necessary for the subcommittee to operate effectively and in alignment with AMSC goals and objectives. Representation from the ReCoM Intelligence Group will ensure the fusion of TCO/smuggling based intelligence with maritime terrorism based intelligence for final report to AMSC ESC. This also addresses and resolves the concerns mentioned in last year's annual AMSC report.

Accomplishment: Integration of Command Bridge into the San Diego Joint Harbor Operations Center (JHOC).

Explanation: The San Diego AMSC and FMSC successfully integrated Command Bridge, a Geographic Information System (GIS) integrated situational awareness platform designed to aggregate sensor feeds and provides the Joint Harbor Operations Center (JHOC) relevant & actionable information to monitor Maritime activity and respond to incidents.

Columbia River AMSC

Accomplishment: Full Scale Exercise.

Explanation: Sector Columbia River conducted an AMSTEP Full Scale Exercise in April. The exercise scenario involved an explosion, of an unknown cause, on a foreign freighter loaded with barite, moored at Terminal 2 at the Port of Portland. The exercise was designed to test the MARSEC elevation process and emergency responses from Law Enforcement, Fire and Emergency Medical Services (objectives: test MARSEC Elevation, Validation of roles, Evaluation of procedures, and validate structure for post-incident recovery activities.).

Accomplishment: Administrative Review.

Explanation: Thorough administrative review conducted on the AMSC records. Recommendations for process improvement include amending the charter to accurately reflecting the current operations and deliberations of the committee, soliciting for new members, updating serving member's appointments and renewing efforts to accomplish the goals of the Sector Columbia River Consolidated System-Wide Risk Management/Mitigation/Trade Resumption/Resiliency, and Five Year Prioritized Project Plan.

Puget Sound AMSC

Accomplishment: General AMSC Membership.

Explanation: Major accomplishments include increasing the AMSC GC membership from 75 to over 190 members. In addition to an increased body, the committee has a new sense of vibrancy. The members are given informational packets and each meeting is packed with informative speakers that present on agency or industry programs. Most notable presentations include the BIO Watch Program from OHS, State Fusion Center Intelligence Briefing, Adaptive Modeling Program from NORTHCOM, Canadian/U.S. Maritime Security Program (CANUS) from the University of Washington and many others. Great information flow is occurring between the members. Working Groups and Subcommittees are nimble and goal oriented. They present the AMSC GC and EC with viable recommendations in mitigating identified risks. Relationships between the members are stronger; there is an increased sense of collaborative purpose.

Accomplishment: AMSC Workshop.

Explanation: An AMSC Intelligence Sharing and Multi-Prong Attack Workshop was held in October 2017 and included Intelligence and Response modules at different MARSEC Levels. This 4 hour workshop had an Intelligence sharing module and a Multi-prong attack of a variety of targets in the port module. The workshop was attended by 42 people and was widely praised by Federal, State and local Intelligence and Response Agencies as well as representatives from Maritime Transportation components such as Washington State and County Ferries, Holland America and Argosy Cruises. Key take a

ways from the workshop included the challenges by both agencies and stakeholders alike in maintaining MARSEC 2 condition for an extended period of time. Members requested if possible Selective MARSEC implementation by COTP by either Industry Type or Geography.

Accomplishment: COTP Survey.

Explanation: COTP sponsored survey went out to all AMSC members in September-October of 2017. The goal of the Survey was to see if the SPS AMSC Meetings were meeting the needs of the Membership. Key takeaways were that overall the AMSC membership was very pleased with the new direction and content of the meetings. Three changes included removing any presentations or presenters that related to the sale of commercial products, publishing a yearlong meeting calendar, and rotating AMSC GC meeting locations to other locations within Puget Sound. The new meeting location rotation balances out the commute for the members coming from far North, South and across the Sound locations, which often resulted in 4 hours of commuting time for these members.

Commonwealth of Northern Mariana Islands (CNMI) AMSC

Accomplishment: Developed and tested new Terminal Security Plan.

Explanation: The new Terminal Security Plan, developed for the Commonwealth Ports Authority with the assistance of the AMSC, was tested during a 2017 Cruise Ship Security AMSTEP TTX.

Accomplishment: Updated and reformatted the CNMI AMSP.

Explanation: A COTP and AMSC Chairperson priority before transferring in the summer of 2017 was the complete update and reformat of the CNMI AMSP.

Guam AMSC

Accomplishment: Underwater Assessment/Repair Recommendations.

Explanation: The AMSC members in consultation with the U.S. Navy Underwater Construction Team Two were able to prioritize a list of needed repairs at critically located port stakeholder piers. The AMSC will start to document the need in current or future PSGP solicitations for investment justifications.

Accomplishment: Container Security Working Group.

Explanation: The determination to stand up a Container Security Working Group to discuss the implementation of a Harmonized Commodity Description and Coding system to assist Guam Customs and Quarantine to track high-risk container ships/containers entering the Commercial Port of Guam. The working group addressed the following during CY17:

1. Identify existing locations in the commercial port that can be used to store containers that need to be inspected and recommendations to develop additional container storage as needed.
2. Identify additional x-ray equipment from other agencies to be used at the Commercial Port of Guam.
3. Have Guam Customs and Quarantine and U.S. Customs and Border Protection share database information and resources to assist with container search/security issues.

Accomplishment: 2017 PSGP Awards.

Explanation: The Guam AMSC played an instrumental role in a \$384,469 Port Security Grant Program (PSGP) award for the refurbishment and hardening of Port Authority of Guam's (PAG) load center buildings housing prime power generators, and an \$179,550 PSGP award for a maintenance and sustainment contract for the PAG prime power generators. The improvements to the prime generators address a long-standing port resiliency/all-hazards vulnerability by giving the port the ability to operate independently from the island power grid provided by Guam Power Authority.

Hawaii and American Samoa AMSC

Accomplishment: Hawaii Department of Defense - Hilo Port Area.

Explanation: The State of Hawaii was awarded \$337,550 for the purchase of one 27 foot Watercraft for prevention and response for use on or around the Island of Hawaii equipped with appropriate specialized RAD/NUC detection, CBRNE, and side-scan sonar designed to perform security and surveillance missions within the port area of Hilo and Kawaihae. The State of Hawaii Department of Land and Natural Resources (DLNR) provides law enforcement governance, protection, security, search and rescue within State waters. The USCGC KISKA was removed from Hilo significantly reducing response and recovery operational capabilities to the Island of Hawaii. There are no USCG small boat capabilities on the island. The nearest USCG station is on the Island of Maui approximately 135 nautical miles away and 194 nautical miles from Honolulu. Therefore, Hawaii Island DLNR will be the only on-water Law Enforcement agency for the entire island with the ability to respond, detect, deter and defeat a threat and provide immediate port assessment of underwater hazards deploying their side-scan sonar equipment following a major disaster or port closure. This award is a huge success to the State and is another value resource documented in the AMSP.

Prince William Sound (PWS) AMSC

Accomplishment: Port Partners.

Explanation: The PWSAMSC has formed effective partnerships with State of Alaska DHS and National Guard Planners to participate in several Maritime Security related exercises within the MSU Valdez AOR. These exercises were not originally planned for in the Units annual Master Training and Exercise Plan (MTEP) document but District 17 was able to support with funding. The exercises have greatly increased the knowledge of security resources in Prince William Sound.

Accomplishment: Security Zone Signage.

Explanation: New professional signage around the port of Valdez appears to have reduced the amount of inadvertent security zone incursions around the Valdez Marine Terminal.

Southeast Alaska AMSC

Accomplishment: RAD/NUC training, equipment and cooperation.

Explanation: With the creation of the Rad/Nuc annex, the AMSC is preparing members through training and workshops for a joint full-scale exercise in early 2018 that will provide a significant CBRNE training opportunity for Federal and local Law Enforcement.

Western Alaska AMSC

Accomplishment: HVU Port Visit.

Explanation: Western Alaska (WA) AMSC and Dutch Harbor subcommittee personnel coordinated actions and activities to provide maritime security for a High Value Unit (HVU) port call at the International Port of Dutch Harbor.

Accomplishment: Alaska National Guard War-game TTX.

Explanation: WAAMSC representatives and senior officials participated in an Alaska National Guard (ANG) executive level war-game tabletop exercise (TTX). The war game was designed to further validate, coordinate and refine mission partners' actions to support the State of Alaska following a Homeland Defense event. The scenario simulated an Improvised Nuclear Device (IND) attack on the Port of Alaska, and the associated follow on actions including response, investigation, and marine transportation system recovery.